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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/721,450	11/25/2003	John J. Breen	16356.827 (DC-05388)	7118

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HAYNES AND BOONE, LLP
901 Main Street
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EXAMINER

ONEILL, KARIE AMBER

ART UNIT	PAPER NUMBER
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1795

MAIL DATE	DELIVERY MODE
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11/30/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/721,450

Applicant(s)

BREEN ET AL.

Examiner

Karie O'Neill

Art Unit

1795

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 29-54 is/are pending in the application.
- 4a) Of the above claim(s) 29-50 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 51-54 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 30, 2007, has been entered.
2. Claim 51 has been amended. Claims 1-29 have been canceled. Claims 29-50 have been withdrawn from consideration. Therefore, Claims 51-54 are pending in this office action.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claim 51 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The phrase "high enough" is considered a relative term. "High enough" compared to what?
5. Claim 51 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The phrase "an additional shipping fee" is unclear, because

no shipping fee has been disclosed in the claim in order to necessitate an "additional" fee.

6. Claim 51 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The term "separable" is considered a relative term. Any two items can be "separable" in some way.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The instant claims are product claims, drawn to a battery powered device, the device comprising a chassis, a battery bay, and a battery assembly located in the battery bay, the battery assembly comprising a plurality of battery subassemblies. The battery assembly is operable to provide power to the battery powered device, and the plurality of battery subassemblies are operable to be mechanically mated and electrically coupled together to form the battery assembly.

The method step, wherein the battery subassemblies are mechanically and electrically separable "to be shipped" such that the additional shipping fee that would be incurred due to the battery assembly watt-hour rating is avoided, is considered

functional language which imparts intended use to the structural components of the claimed battery powered device of the instant claims. While features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. *In re Schreiber*, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997). A claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. *Ex parte Masham*, 2 USPQ2d 1647 (Bd. Pat. App. & Inter. 1987).

The plurality of battery subassemblies comprises: a first battery subassembly comprising a first subassembly to subassembly electrical connector, a first subassembly to subassembly mechanical connector, and a device power connector to supply power to the battery powered device, and a second battery subassembly electrically coupled and mechanically connected mated to the first battery subassembly, the second battery subassembly comprising a second subassembly to subassembly electrical connector electrically connected coupled to the first subassembly to subassembly electrical connector of the first battery subassembly and a second subassembly to subassembly mechanical connector mechanically connected coupled to the first subassembly to subassembly mechanical connector of the first battery subassembly,.

The first battery subassembly includes a first battery subassembly watt-hour rating that is less than the battery assembly watt- hour rating, and the second battery subassembly includes a second battery subassembly watt-hour rating that is less than

the battery assembly watt-hour rating. This is inherent, because a sub-assembly would have a watt-hour rating lower as an individual entity than when combined with another subassembly, forming a whole battery assembly. The watt-hour rating is additive. One sub-assembly combined with a second sub-assembly would incur a high watt-hour rating than just one sub-assembly alone.

9. Claims 51-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Osaka (US 5,628,054) and in view of Rasmussen et al. (US 2003/0167244 A1), as evidenced by Wehmeyer.

With regard to Claims 51-52, Osaka discloses a battery powered device or portable radio apparatus, comprising a chassis or main unit (12) and a battery pack (14) with a battery bay attached to the chassis; and a battery assembly located in the battery bay and operable to provide power to the portable radio apparatus, the battery assembly comprising a plurality of battery subassemblies that are operable to be mechanically and electrically connected together to form the battery assembly. The battery pack contains a nickel metal hydride battery (14a) and a lithium ion battery (14b) which are connected electrically, as can be seen in Figures 1 and 2, and mechanically connected through the cable that electrically connects the two battery subassemblies together. In Figure 2, the nickel metal hydride battery (14a) comprises a first subassembly to subassembly electrical connector, a first subassembly to subassembly mechanical connector provided through the cable which connects the subassemblies to one another, and a device power connector or power output terminal to supply power to

the radio apparatus (15a). Figure 2 also discloses a lithium ion battery (14b) with a second battery subassembly electrically and mechanically connected to the first battery subassembly (14a), the second battery subassembly comprising a second subassembly to subassembly electrical connector electrically connected to the first subassembly of the first battery and a second subassembly to subassembly mechanical connector mechanically connected to the first subassembly of the first battery. The first battery subassembly includes a first battery subassembly watt-hour rating that is less than the battery assembly watt-hour rating, and the second battery subassembly includes a second battery subassembly watt-hour rating that is less than the battery assembly watt-hour rating. This is inherent, because a sub-assembly would have a watt-hour rating lower as an individual entity than when combined with another subassembly, forming a whole battery assembly. The watt-hour rating is additive. One sub-assembly combined with a second sub-assembly would incur a high watt-hour rating than just one sub-assembly alone.

Osaka does not disclose the method step wherein the battery subassemblies are to be shipped such that an additional shipping fee that would be incurred due to the battery assembly watt-hour rating is avoided. However, the instant claims are drawn to a battery powered device, not the method steps of shipping the battery powered device, the method steps being considered functional language which imparts intended use to the structural components of the claimed battery powered device of the instant claims. While features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure

rather than function. *In re Schreiber*, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997). A claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. *Ex parte Masham*, 2 USPQ2d 1647 (Bd. Pat. App. & Inter. 1987). Therefore, the steps have been considered but are given no patentable weight.

Rasmussen et al. disclose a method of optimizing weight based delivery fees. The contents of the components to be shipped may be modified to reduce the overall weight of the package to be shipped when such a weight reduction results in the package weight being within a lower weight category resulting in a lower delivery cost (paragraph 0010). While Rasmussen et al. do not disclose the components to be shipped as battery subassemblies, it is disclosed that once the individual weights of the components of the parcel have been determined, a total weight of the parcel is calculated and a comparison between the total weight and the incremental weight breakpoints is made. If the delivery fee of the individual component is less than that of the total weight of the components it would be evident that one would ship the individual components separately. Therefore, it would have been obvious to one of ordinary skill in the art to ship each of the batteries separately so as not to damage the cells in transit, and in order to keep the shipping costs down so as to maintain a product that is cost effective and within a price range for the consumer to purchase both of the battery subassemblies. Consequently, they are to be used together to power the battery powered device, as disclosed by Osaka.

Wehmeyer discloses the energy density of several different battery types, energy density including the watt-hour rating of the battery based on the weight of the battery. The energy density of each individual battery teaches that the watt-hour rating is directly correlated with the weight, in kilograms or liters, of the battery. Rasmussen et al. teach the shipping costs incurred are based upon the individual and/or total weight of the items or batteries to be shipped. Wehmeyer links the weight and watt-hour rating to one another through the disclosure of the energy density. If the battery is to provide a certain or given energy density, the watt-hour rating of the battery must adjust to meet these demands. When the watt-hour rating adjusts, meaning it increases or decreases the energy density the battery is able to provide, the weight of the battery also varies accordingly, because the watt-hour rating is shown in Wehmeyer as a function of weight.

With regard to Claims 53 and 54, Osaka discloses in Figure 4, the battery powered device or portable radio apparatus comprises an information handling system which comprises a processor or processing section (12b) which receives and transmits signals located in the chassis or main unit (12). Although a memory is not disclosed by Osaka, it is known that with a portable radio apparatus a memory would be present so as to remember the frequency that the radio was last programmed or tuned to before and after turning on and off the apparatus.

Response to Arguments

10. Applicant's arguments filed October 30, 2007, have been fully considered but they are not persuasive.

Applicant's principal arguments are:

(a) Applicant submits that the examiner has failed to teach the key limitations of the independent claim. Therefore, it is impossible to render the subject matter of the claims as a whole obvious based on a single reference or any combination of the references, and the above explicit terms of the statute cannot be met.

In response to Applicant's arguments, please consider the following comments:

(a) Examiner has addressed the currently amended key limitations of the independent claim using a combination of references.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karie O'Neill whose telephone number is (571) 272-8614. The examiner can normally be reached on Monday through Friday from 8am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on (571) 272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number:
10/721,450
Art Unit: 1795

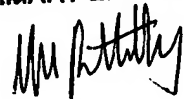
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Karie O'Neill
Examiner
Art Unit 1795

KAO

MARK RUTHKOSKY
PRIMARY EXAMINER



11-19-07